What Is Claimed Is:

1. A method for determining an operating state on triggering a fan motor (2), the fan motor (2) being operated with the aid of a switching device (3), the switching device (3) being triggered via a pulse-width-modulated triggering signal (5), a pulse duty factor of the triggering signal (5) predefining a triggering state of the fan motor,
wherein a voltage potential at the node between fan motor and switching device (3) or a motor current is measured as a measured variable (V_{meas}), an operating state on triggering the fan motor (2) being determined as a function of the measured variable (V_{meas}) and the pulse duty factor (Tv).

2. The method as recited in Claim 1,
wherein the measured variable (V_{meas}) is low-pass filtered in such a way that the measured variable is smoothed.

3. The method as recited in Claim 1 or 2,
wherein an open load fault is recognized if the voltage potential essentially corresponds to the supply voltage potential (V_{GND}) of the fan motor (2) applied to the switching device (3).

4. The method as recited in Claims 1 through 3,
wherein, upon recognition of an open load fault, the switching device (3) is switched through for a specific period of time, in order to apply the maximum voltage to the fan motor (2), so that merely oxidized connection points are cleaned.

5. The method as recited in Claims 1 through 4,
wherein normal operation is recognized if the voltage potential (V_{meas}) is essentially proportional to the pulse duty factor (Tv) and the voltage potential (V_{meas}) is in a defined voltage range in relation to the applied pulse duty factor (Tv).

6. The method as recited in Claim 5,
wherein the defined voltage range is determined by a measurement at a defined applied supply voltage at different pulse duty factors (Tv).

7. The method as recited in Claim 5 or 6,
wherein an overvoltage fault is recognized if the measured voltage potential (V_{meas}) is above the defined voltage range.

8. The method as recited in Claim 1,
wherein blocking or sluggishness of the fan motor (2) is recognized if the motor current is outside a defined current range.

9. The method as recited in Claim 8,
wherein the defined current range is determined by a measurement at a defined applied supply voltage at different pulse duty factors.

10. A control circuit (1) for a fan motor (2) for determining an operating state on triggering the fan motor, the control circuit (1) comprising a pulse width modulation circuit (5), which triggers a switching device (3) using a pulse-width-modulated signal (S) having a pulse duty factor (Tv), the switching device (3) being connected to a first supply potential (V_{GND}), the fan motor (2) being connectable between a second supply potential (V_{Bat}) and the switching device (3), a measuring circuit being provided in order to pick up a measured variable at the switching device,
wherein an analyzer circuit (11) is provided in order to check the measured variable (V_{meas}) and determine an operating state as a function of the measured variable (V_{meas}) and the pulse duty factor (Tv).

11. The control circuit (1) as recited in Claim 8,
wherein a filter circuit (9) is provided in order to smooth the measured variable (V_{meas}) in such a way that the measured variable is essentially proportional to the pulse duty factor (Tv).

12. The control circuit as recited in Claim 8 or 9,
wherein a compensating circuit having a data memory (12) is provided in order to perform a compensation of the control circuit (1), the compensating circuit (14) being connected to the measuring circuit (V_{Bat}) in order to measure a reference variable at a defined applied supply voltage and store the reference variable as reference values ($V_{setoint}$) in relation to the particular pulse duty factor (Tv).

13. The control circuit (1) as recited in Claim 10,
wherein the comparator circuit (14) stores further reference values ($V_{setpoint}$) in the data memory, the comparator circuit determining the further reference values ($V_{setpoint}$) from interpolation of the measured reference values ($V_{setpoint}$).

14. The control circuit (1) as recited in Claim 10 or 11,
wherein the analyzer circuit (11) checks the measured variable to determine the operating state, by comparing the measured variable (V_{meas}) to the reference values ($V_{setpoint}$) stored in the data memory (12) in regard to the particular applied pulse duty factor (Tv) and an operating state is recognized as a function of the deviation between the measured variable (V_{meas}) and the reference variable ($V_{setpoint}$).

15. The control circuit (1) as recited in Claims 8 through 12,
wherein a data interface (6) is provided to transmit the recognized operating state over a network.

16. The control circuit (1) as recited in one of Claims 10 through 15,
wherein the measuring circuit measures a voltage between the fan motor (2) and the switching device (3).

17. The control circuit (1) as recited in one of Claims 10 through 16,
wherein the measuring circuit measures a motor current through the fan motor (2).

18. The control circuit (1) as recited in Claim 17,
wherein the switching device (3) has a sense FET (20) to measure the motor current through the fan motor.

19. The control circuit (1) as recited in Claim 18,
wherein the sense FET (20) is connected to a transformer circuit to convert the motor current into a proportional voltage, the voltage being provided to the measuring circuit.